

ANALYTICAL REPORT

Prepared by
Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Cabo Rojo Site
Puerto Rico

March 2012

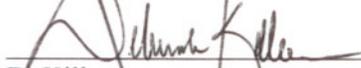
EPA Work Assignment No. SERAS-130
LOCKHEED MARTIN Work Order SER0130
EPA Contract No. EP-W-09-031

Submitted to
J. Catanzarita
EPA/ERT
2890 Woodbridge Avenue
Edison NJ 08837


V. Kansal
Analytical Support Leader

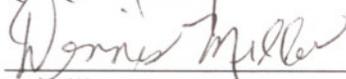
3/2/12
Date

Analysis by:
ERT/SERAS


D. Killeen
QA/QC Officer

3/10/12
Date

Prepared by:
Y. Mehra


D. Miller
Program Manager

3/10/12
Date

Validated by:
R. Varsolona

REPORT OF LABORATORY ANALYSIS

SERAS-130-DAR-031212

This report shall not be reproduced, except in full,
without the written consent of the ERT/SERAS Laboratory





Table of Contents

Topic

Testing Laboratories Information
Detailed Sample Information
Introduction
Case Narrative
Summary of Abbreviations

Section I

Results of the Analysis for VOC (ppbv) in Air	Table 1.1a
Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air	Table 1.1b

Section II

Results of the LCS Analysis for VOC in Air	Table 2.1
Results of the Duplicate Analysis for VOC in Air	Table 2.2

Section III

Chains of Custody

Appendices

Appendix A Data for VOC in Air	X 031
--------------------------------	-------

Appendices will be furnished on request.



TESTING LABORATORIES INFORMATION

Analysis of Volatile Organic Compounds in Air (SERAS SOP# 1814, EPA Method TO-15)

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for TO-15 analysis in air.

REPORT OF LABORATORY ANALYSIS

**This report shall not be reproduced, except in full,
without the written consent of the ERT/SERAS Laboratory**

SERAS-130-DAR-031212





Detailed Sample Information

<u>SERAS SAMPLE #</u>	<u>Field Sample #</u>
R203001-01	0-130-1009
R203001-02	0-130-1010
R203001-03	0-130-1011
R203001-04	0-130-1030
R203001-05	0-130-1031
R203001-06	0-130-1032
R203001-07	0-130-1056
R203001-08	0-130-1027
R203001-09	0-130-1028
R203001-10	0-130-1029
R203001-11	0-130-1034
R203001-12	0-130-1035
R203001-13	0-130-1036
R203001-14	0-130-1038
R203001-15	0-130-1040
R203001-16	0-130-1014
R203001-17	0-130-1015
R203001-18	0-130-1016
R203001-19	0-130-1017
R203001-20	0-130-1023
R203001-21	0-130-1024
R203001-22	0-130-1025
R203001-23	0-130-1026

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of the ERT/SERAS Laboratory

SERAS-130-DAR-031212





Introduction

SERAS personnel, in response to WA# SERAS-130, provided analytical support for environmental samples collected from the Cabo Rojo Site in Puerto Rico, as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples were treated with procedures consistent with those specified in SERAS SOP #1008, *Operation of Sample Refrigeration Units and Sample Receiving, Handling and Storage*.

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/ Method	Laboratory	Data Package
0-130-3/1/12-0006	8	03/01/12	03/02/12	03/03-03/05/12	Air	TO-15(VOC) SERAS SOP 1814	ERT/SERAS	X 031
0-130-3/1/12-0007	8							
0-130-3/1/12-0008	6							
	1				Trip Blank			

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

TO-15 (VOC) in Air Package X 031

Acetone and isopropyl alcohol were detected above the reporting limit (RL) in the canister of samples: 0-130-1029 and -1040 during the SUMMA certification process. The isopropyl alcohol result for sample 0-130-1029 is qualified estimated (J) as the results may be biased high.

The method blanks of 3/3/12 and 3/4/12 contained acetone above the RL. The acetone result for sample 0-130-1056 is qualified non-detect (U) and its RL has been raised to the level of acetone in the sample.

Isopropyl alcohol did not meet the %RSD criterion for the initial calibration of 9/22/11. Isopropyl alcohol is qualified estimated (J) for samples: 0-130-1026, 0-130-1028, 0-130-1035, 0-130-1038 and 0-130-1040.

The low point(s) of the initial calibration were dropped for acetone and isopropyl alcohol. The RL is based on the 100 ppt standard for acetone and 500 ppt standard for isopropyl alcohol for samples: 0-130-1014 through 0-130-1017, 0-130-1023 through 0-130-1029, 0-130-1034 through 0-130-1036, 0-130-1038, 0-130-1040 and 0-130-1056.

Vinyl acetate was below the % recovery criterion for the LCS of 3/4/12. The vinyl acetate result is estimated (UJ) for samples: 0-130-1014 through 0-130-1017, 0-130-1023 through 0-130-1029, 0-130-1034 through 0-130-1036, 0-130-1038, 0-130-1040 and 0-130-1056.

The results presented in this report only relate to the samples analyzed. All results are intended to be considered in their entirety. The Environmental Response Team/Scientific, Engineering, Response and Analytical Services laboratory is not responsible for utilization of less than the complete report.





Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09





Table 1.1a Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-01		R203001-02		R203001-03		R203001-04	
Sample Number	0-130-1009		0-130-1010		0-130-1011		0-130-1030	
Sample Location	S2B-IA2		S2B-IA1		S2B-IA1		S2B-AMB1	
	3/3/2012	Method Blank						
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698

Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-05		R203001-06	
Sample Number	0-130-1031		0-130-1032	
Sample Location	S2B-AMB2		S2B-AMB3	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No. Sample Number Sample Location	3/3/2012 Method Blank		R203001-07 0-130-1056 TRIP BLANK		R203001-16 0-130-1014 EQP-IA1		R203001-17 0-130-1015 EQP-IA1		R203001-18 0-130-1016 EQP-IA3	
	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Propylene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Dichlorodifluoromethane	U	0.0698	U	0.0698	0.365	0.0698	0.360	0.0698	0.198	0.0698
Chloromethane	U	0.0698	U	0.0698	0.736	0.0698	0.722	0.0698	0.446	0.0698
Dichlorotetrafluoroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Acetone	0.275	0.233	U	0.599	48.5	0.233	46.7	0.233	41.2	0.233
Trichlorofluoromethane	U	0.0698	U	0.0698	0.221	0.0698	0.207	0.0698	0.198	0.0698
Isopropyl Alcohol	U	1.16	U	1.16	U	1.16	U	1.16	U	1.16
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	U	0.0698	0.239	0.0698	0.227	0.0698	0.226	0.0698
Trichlorotrifluoroethane	U	0.0698	U	0.0698	0.0790	0.0698	0.0728	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Vinyl Acetate	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
2-Butanone	U	0.0698	U	0.0698	1.15	0.0698	1.23	0.0698	0.808	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Ethyl Acetate	U	0.0698	U	0.0698	1.30	0.0698	1.35	0.0698	1.16	0.0698
Hexane	U	0.0698	U	0.0698	0.654	0.0698	0.642	0.0698	0.629	0.0698
Chloroform	U	0.0698	U	0.0698	1.24	0.0698	1.22	0.0698	1.20	0.0698
Tetrahydrofuran	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.260	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,1-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Benzene	U	0.0698	U	0.0698	0.307	0.0698	0.294	0.0698	0.299	0.0698
Carbon Tetrachloride	U	0.0698	U	0.0698	0.0765	0.0698	0.0729	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Heptane	U	0.0698	U	0.0698	0.219	0.0698	0.168	0.0698	0.239	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	U	0.0698	U	0.0698	0.264	0.0698	0.433	0.0698	0.236	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Toluene	U	0.0698	U	0.0698	3.36	0.0698	3.31	0.0698	3.17	0.0698
2-Hexanone	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	U	0.0698	0.0891	0.0698	0.110	0.0698	0.0939	0.0698
Chlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Ethylbenzene	U	0.0698	U	0.0698	0.305	0.0698	0.296	0.0698	0.283	0.0698
m&p-Xylene	U	0.0698	U	0.0698	0.991	0.0698	0.939	0.0698	0.920	0.0698
Bromoform	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Styrene	U	0.0698	U	0.0698	0.105	0.0698	0.104	0.0698	0.0995	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
o-Xylene	U	0.0698	U	0.0698	0.410	0.0698	0.386	0.0698	0.380	0.0698
p-Ethyltoluene	U	0.0698	U	0.0698	0.297	0.0698	0.294	0.0698	0.281	0.0698
1,3,5-Trimethylbenzene	U	0.0698	U	0.0698	0.251	0.0698	0.238	0.0698	0.239	0.0698
1,2,4-Trimethylbenzene	U	0.0698	U	0.0698	0.702	0.0698	0.647	0.0698	0.650	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,4-Dichlorobenzene	U	0.0698	U	0.0698	0.0773	0.0698	0.0700	0.0698	0.0757	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

Analyte	R203001-19		R203001-20		R203001-21		R203001-22		R203001-23	
	Results	RL								
Sample Number	0-130-1017		0-130-1023		0-130-1024		0-130-1025		0-130-1026	
Sample Location	EQP-IA2		EQP-IA5		EQP-IA4		EQP-AMB1		EQP-AMB2	
	ppbv	ppbv								
Propylene	U	0.0698								
Dichlorodifluoromethane	0.317	0.0698	0.317	0.0698	0.353	0.0698	0.348	0.0698	0.368	0.0698
Chloromethane	0.663	0.0698	0.699	0.0698	0.735	0.0698	0.706	0.0698	0.796	0.0698
Dichlorotetrafluoroethane	U	0.0698								
Vinyl Chloride	U	0.0698								
1,3-Butadiene	U	0.0698								
Bromomethane	U	0.0698								
Chloroethane	U	0.0698								
Acetone	44.9	0.233	26.7	0.233	48.6	0.233	5.26	0.233	6.29	0.233
Trichlorofluoromethane	0.202	0.0698	0.220	0.0698	0.206	0.0698	0.195	0.0698	0.212	0.0698
Isopropyl Alcohol	U	1.16	U	1.16	U	1.16	U	1.16	3.43	1.16
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	0.223	0.0698	0.0983	0.0698	0.124	0.0698	0.0988	0.0698	0.0802	0.0698
Trichlorotrifluoroethane	U	0.0698	0.0802	0.0698	0.0831	0.0698	U	0.0698	0.0846	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
MTBE	U	0.0698								
Vinyl Acetate	U	0.0698								
2-Butanone	0.652	0.0698	0.628	0.0698	0.718	0.0698	0.686	0.0698	0.923	0.0698
cis-1,2-Dichloroethene	U	0.0698								
Ethyl Acetate	1.09	0.0698	0.278	0.0698	0.453	0.0698	0.597	0.0698	0.712	0.0698
Hexane	0.674	0.0698	0.371	0.0698	0.496	0.0698	0.495	0.0698	0.439	0.0698
Chloroform	1.19	0.0698	1.51	0.0698	3.25	0.0698	U	0.0698	0.123	0.0698
Tetrahydrofuran	0.302	0.0698	0.324	0.0698	0.117	0.0698	0.467	0.0698	0.386	0.0698
1,2-Dichloroethane	U	0.0698								
1,1,1-Trichloroethane	U	0.0698								
Benzene	0.286	0.0698	0.231	0.0698	0.287	0.0698	0.265	0.0698	0.247	0.0698
Carbon Tetrachloride	0.0748	0.0698	0.0800	0.0698	0.0825	0.0698	U	0.0698	U	0.0698
Cyclohexane	U	0.0698								
1,2-Dichloropropane	U	0.0698								
1,4-Dioxane	U	0.0698								
Trichloroethene	U	0.0698								
Heptane	0.176	0.0698	0.106	0.0698	U	0.0698	0.129	0.0698	0.129	0.0698
cis-1,3-Dichloropropene	U	0.0698								
Methyl Isobutyl Ketone	0.229	0.0698	0.349	0.0698	0.308	0.0698	U	0.0698	U	0.0698
trans-1,3-Dichloropropene	U	0.0698								
1,1,2-Trichloroethane	U	0.0698								
Toluene	3.26	0.0698	2.74	0.0698	1.93	0.0698	1.69	0.0698	1.58	0.0698
2-Hexanone	U	0.0698								
Dibromochloromethane	U	0.0698								
1,2-Dibromoethane	U	0.0698								
Tetrachloroethene	0.0869	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chlorobenzene	U	0.0698								
Ethylbenzene	0.302	0.0698	0.186	0.0698	0.237	0.0698	0.163	0.0698	0.195	0.0698
m&p-Xylene	0.974	0.0698	0.661	0.0698	0.777	0.0698	0.552	0.0698	0.581	0.0698
Bromoform	U	0.0698								
Styrene	0.0944	0.0698	0.0720	0.0698	0.127	0.0698	U	0.0698	U	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698								
o-Xylene	0.395	0.0698	0.262	0.0698	0.319	0.0698	0.203	0.0698	0.235	0.0698
p-Ethyltoluene	0.278	0.0698	0.114	0.0698	0.232	0.0698	U	0.0698	U	0.0698
1,3,5-Trimethylbenzene	0.233	0.0698	0.105	0.0698	0.186	0.0698	U	0.0698	U	0.0698
1,2,4-Trimethylbenzene	0.658	0.0698	0.300	0.0698	0.502	0.0698	0.195	0.0698	0.181	0.0698
1,3-Dichlorobenzene	U	0.0698								
1,4-Dichlorobenzene	0.0771	0.0698	U	0.0698	0.127	0.0698	U	0.0698	U	0.0698
1,2-Dichlorobenzene	U	0.0698								

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

Analyte	R203001-09		R203001-10		R203001-08		R203001-11		R203001-12	
	Results	RL								
	ppbv	ppbv								
Propylene	U	0.0698								
Dichlorodifluoromethane	0.419	0.0698	0.307	0.0698	0.368	0.0698	0.400	0.0698	0.356	0.0698
Chloromethane	0.902	0.0698	0.847	0.0698	0.798	0.0698	0.862	0.0698	0.740	0.0698
Dichlorotetrafluoroethane	U	0.0698								
Vinyl Chloride	U	0.0698								
1,3-Butadiene	U	0.0698								
Bromomethane	U	0.0698								
Chloroethane	U	0.0698								
Acetone	165	5.00	8.01	0.233	446	5.00	779	5.00	9790	40.0
Trichlorofluoromethane	0.231	0.0698	0.212	0.0698	0.205	0.0698	0.222	0.0698	0.260	0.0698
Isopropyl Alcohol	1.62	J 1.16	2.57	J 1.16	U	1.16	U	1.16	2.45	J 1.16
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	0.234	0.0698	0.128	0.0698	0.714	0.0698	1.26	0.0698	33.2	0.0698
Trichlorotrifluoroethane	0.0755	0.0698	0.0755	0.0698	0.0733	0.0698	0.0859	0.0698	0.0840	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
MTBE	U	0.0698								
Vinyl Acetate	U	J 0.0698								
2-Butanone	1.14	0.0698	1.57	0.0698	1.26	0.0698	0.738	0.0698	1.79	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.151	0.0698	U	0.0698
Ethyl Acetate	0.876	0.0698	1.00	0.0698	1.28	0.0698	1.20	0.0698	U	0.0698
Hexane	0.868	0.0698	0.517	0.0698	1.84	0.0698	3.22	0.0698	9.86	0.0698
Chloroform	0.492	0.0698	U	0.0698	0.346	0.0698	0.385	0.0698	0.358	0.0698
Tetrahydrofuran	0.272	0.0698	0.284	0.0698	0.250	0.0698	0.290	0.0698	2.03	0.0698
1,2-Dichloroethane	U	0.0698								
1,1,1-Trichloroethane	U	0.0698								
Benzene	0.249	0.0698	0.338	0.0698	0.345	0.0698	0.384	0.0698	0.524	0.0698
Carbon Tetrachloride	0.0730	0.0698	U	0.0698	U	0.0698	0.0713	0.0698	U	0.0698
Cyclohexane	U	0.0698	U	0.0698	0.0899	0.0698	U	0.0698	0.570	0.0698
1,2-Dichloropropane	U	0.0698								
1,4-Dioxane	U	0.0698								
Trichloroethene	U	0.0698								
Heptane	0.146	0.0698	0.143	0.0698	0.213	0.0698	0.275	0.0698	0.332	0.0698
cis-1,3-Dichloropropene	U	0.0698								
Methyl Isobutyl Ketone	0.394	0.0698	U	0.0698	0.401	0.0698	0.147	0.0698	2.27	0.0698
trans-1,3-Dichloropropene	U	0.0698								
1,1,2-Trichloroethane	U	0.0698								
Toluene	1.99	0.0698	3.61	0.0698	4.46	0.0698	4.66	0.0698	40.8	0.0698
2-Hexanone	U	0.0698	U	0.0698	0.132	0.0698	U	0.0698	U	0.0698
Dibromochloromethane	U	0.0698								
1,2-Dibromoethane	U	0.0698								
Tetrachloroethene	U	0.0698	U	0.0698	0.103	0.0698	0.236	0.0698	1.81	0.0698
Chlorobenzene	U	0.0698								
Ethylbenzene	0.184	0.0698	0.204	0.0698	0.337	0.0698	0.451	0.0698	0.715	0.0698
m&p-Xylene	0.693	0.0698	0.695	0.0698	1.45	0.0698	1.98	0.0698	3.22	0.0698
Bromoform	U	0.0698								
Styrene	U	0.0698	0.0718	0.0698	0.0745	0.0698	0.0879	0.0698	0.0990	0.0698
1,1,1,2,2-Tetrachloroethane	U	0.0698								
o-Xylene	0.316	0.0698	0.254	0.0698	0.771	0.0698	1.24	0.0698	3.98	0.0698
p-Ethyltoluene	0.640	0.0698	0.0736	0.0698	2.14	0.0698	4.71	0.0698	38.9	0.0698
1,3,5-Trimethylbenzene	0.492	0.0698	0.0777	0.0698	1.78	0.0698	3.64	0.0698	30.9	0.0698
1,2,4-Trimethylbenzene	1.27	0.0698	0.254	0.0698	4.56	0.0698	9.16	0.0698	91.6	1.50
1,3-Dichlorobenzene	U	0.0698								
1,4-Dichlorobenzene	U	0.0698								
1,2-Dichlorobenzene	U	0.0698								

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1a (cont) Results of the Analysis for VOC (ppbv) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

Analyte	R203001-13		R203001-14		R203001-15	
	Results	RL	Results	RL	Results	RL
Sample Number	0-130-1036		0-130-1038		0-130-1040	
Sample Location	EQP-IA7		EQP-IA8		EQP-IA9	
	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Propylene	U	0.0698	U	0.0698	U	0.0698
Dichlorodifluoromethane	0.233	0.0698	0.358	0.0698	0.360	0.0698
Chloromethane	0.507	0.0698	0.793	0.0698	0.727	0.0698
Dichlorotetrafluoroethane	U	0.0698	U	0.0698	U	0.0698
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698
1,3-Butadiene	U	0.0698	U	0.0698	U	0.0698
Bromomethane	U	0.0698	U	0.0698	U	0.0698
Chloroethane	U	0.0698	U	0.0698	U	0.0698
Acetone	8830	40.0	8540	40.0	384	5.00
Trichlorofluoromethane	0.234	0.0698	0.198	0.0698	0.212	0.0698
Isopropyl Alcohol	U	1.16	1.55 J	1.16	14.9 J	1.16
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	34.0	0.0698	173	1.50	0.321	0.0698
Trichlorotrifluoroethane	0.0800	0.0698	0.0777	0.0698	0.0818	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698
MTBE	U	0.0698	U	0.0698	U	0.0698
Vinyl Acetate	U J	0.0698	U J	0.0698	U J	0.0698
2-Butanone	1.36	0.0698	4.90	0.0698	8.22	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698
Ethyl Acetate	0.0773	0.0698	4.95	0.0698	40.2	0.0698
Hexane	10.2	0.0698	8.97	0.0698	1.45	0.0698
Chloroform	0.388	0.0698	0.167	0.0698	0.466	0.0698
Tetrahydrofuran	1.55	0.0698	1.05	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	0.256	0.0698
1,1,1-Trichloroethane	U	0.0698	0.0790	0.0698	U	0.0698
Benzene	0.530	0.0698	0.918	0.0698	0.680	0.0698
Carbon Tetrachloride	0.0698	0.0698	U	0.0698	U	0.0698
Cyclohexane	0.597	0.0698	1.36	0.0698	0.230	0.0698
1,2-Dichloropropane	U	0.0698	U	0.0698	U	0.0698
1,4-Dioxane	U	0.0698	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698
Heptane	0.356	0.0698	0.484	0.0698	1.28	0.0698
cis-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698
Methyl Isobutyl Ketone	1.81	0.0698	1.79	0.0698	0.103	0.0698
trans-1,3-Dichloropropene	U	0.0698	U	0.0698	U	0.0698
1,1,2-Trichloroethane	U	0.0698	U	0.0698	U	0.0698
Toluene	40.4	0.0698	38.2	0.0698	216	1.50
2-Hexanone	U	0.0698	U	0.0698	0.0842	0.0698
Dibromochloromethane	U	0.0698	U	0.0698	U	0.0698
1,2-Dibromoethane	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	1.82	0.0698	7.01	0.0698	U	0.0698
Chlorobenzene	U	0.0698	U	0.0698	U	0.0698
Ethylbenzene	0.739	0.0698	0.859	0.0698	4.22	0.0698
m&p-Xylene	3.35	0.0698	3.32	0.0698	15.8	0.0698
Bromoform	U	0.0698	U	0.0698	U	0.0698
Styrene	0.103	0.0698	0.173	0.0698	0.463	0.0698
1,1,2,2-Tetrachloroethane	U	0.0698	U	0.0698	U	0.0698
o-Xylene	4.11	0.0698	2.81	0.0698	4.98	0.0698
p-Ethyltoluene	40.6	0.0698	21.4	0.0698	5.18	0.0698
1,3,5-Trimethylbenzene	31.3	0.0698	15.9	0.0698	4.38	0.0698
1,2,4-Trimethylbenzene	87.3	1.50	37.9	0.0698	20.7	0.0698
1,3-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698
1,4-Dichlorobenzene	0.0763	0.0698	0.105	0.0698	0.231	0.0698
1,2-Dichlorobenzene	U	0.0698	U	0.0698	U	0.0698

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.		R203001-01	R203001-02	R203001-03	R203001-04
Sample Number	3/3/2012	0-130-1009	0-130-1010	0-130-1011	0-130-1030
Sample Location	Method Blank	S2B-IA2	S2B-IA1	S2B-IA1	S2B-AMB1

| Analyte | Results | |
|--------------------------|--------------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|-------|
| | $\mu\text{g}/\text{m}^3$ | RL |
| Vinyl Chloride | U | 0.178 |
| 1,1-Dichloroethene | U | 0.277 |
| trans-1,2-Dichloroethene | U | 0.277 |
| 1,1-Dichloroethane | U | 0.282 |
| cis-1,2-Dichloroethene | U | 0.277 |
| 1,2-Dichloroethane | U | 0.282 |
| Trichloroethene | U | 0.375 |
| Tetrachloroethene | U | 0.473 |

Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-05	R203001-06
Sample Number	0-130-1031	0-130-1032
Sample Location	S2B-AMB2	S2B-AMB3

Analyte	Results		Results	
	$\mu\text{g}/\text{m}^3$	RL	$\mu\text{g}/\text{m}^3$	RL
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282
Trichloroethene	U	0.375	U	0.375
Tetrachloroethene	U	0.473	U	0.473

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No. Sample Number Sample Location	3/3/2012 Method Blank		R203001-07 0-130-1056 TRIP BLANK		R203001-16 0-130-1014 EQP-IA1		R203001-17 0-130-1015 EQP-IA1		R203001-18 0-130-1016 EQP-IA3	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120	U	0.120	U	0.120	U	0.120
Dichlorodifluoromethane	U	0.345	U	0.345	1.81	0.345	1.78	0.345	0.979	0.345
Chloromethane	U	0.144	U	0.144	1.52	0.144	1.49	0.144	0.921	0.144
Dichlorotetrafluoroethane	U	0.488	U	0.488	U	0.488	U	0.488	U	0.488
Vinyl Chloride	U	0.178	U	0.178	U	0.178	U	0.178	U	0.178
1,3-Butadiene	U	0.154	U	0.154	U	0.154	U	0.154	U	0.154
Bromomethane	U	0.271	U	0.271	U	0.271	U	0.271	U	0.271
Chloroethane	U	0.184	U	0.184	U	0.184	U	0.184	U	0.184
Acetone	0.653	0.552	U	1.42	115	0.552	111	0.552	97.8	0.552
Trichlorofluoromethane	U	0.392	U	0.392	1.24	0.392	1.16	0.392	1.11	0.392
Isopropyl Alcohol	U	2.85	U	2.85	U	2.85	U	2.85	U	2.85
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	U	0.277
Methylene Chloride	U	0.242	U	0.242	0.831	0.242	0.790	0.242	0.785	0.242
Trichlorotrifluoroethane	U	0.535	U	0.535	0.605	0.535	0.558	0.535	U	0.535
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282	U	0.282
MTBE	U	0.252	U	0.252	U	0.252	U	0.252	U	0.252
Vinyl Acetate	U	0.246	U	0.246	U	0.246	U	0.246	U	0.246
2-Butanone	U	0.206	U	0.206	3.41	0.206	3.64	0.206	2.38	0.206
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	U	0.277
Ethyl Acetate	U	0.251	U	0.251	4.70	0.251	4.87	0.251	4.20	0.251
Hexane	U	0.246	U	0.246	2.31	0.246	2.26	0.246	2.22	0.246
Chloroform	U	0.341	U	0.341	6.07	0.341	5.94	0.341	5.84	0.341
Tetrahydrofuran	U	0.206	U	0.206	U	0.206	U	0.206	0.768	0.206
1,2-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282	U	0.282
1,1,1-Trichloroethane	U	0.381	U	0.381	U	0.381	U	0.381	U	0.381
Benzene	U	0.223	U	0.223	0.981	0.223	0.938	0.223	0.954	0.223
Carbon Tetrachloride	U	0.439	U	0.439	0.481	0.439	0.459	0.439	U	0.439
Cyclohexane	U	0.240	U	0.240	U	0.240	U	0.240	U	0.240
1,2-Dichloropropane	U	0.322	U	0.322	U	0.322	U	0.322	U	0.322
1,4-Dioxane	U	0.251	U	0.251	U	0.251	U	0.251	U	0.251
Trichloroethene	U	0.375	U	0.375	U	0.375	U	0.375	U	0.375
Heptane	U	0.286	U	0.286	0.897	0.286	0.688	0.286	0.981	0.286
cis-1,3-Dichloropropene	U	0.317	U	0.317	U	0.317	U	0.317	U	0.317
Methyl Isobutyl Ketone	U	0.286	U	0.286	1.08	0.286	1.77	0.286	0.967	0.286
trans-1,3-Dichloropropene	U	0.317	U	0.317	U	0.317	U	0.317	U	0.317
1,1,2-Trichloroethane	U	0.381	U	0.381	U	0.381	U	0.381	U	0.381
Toluene	U	0.263	U	0.263	12.7	0.263	12.5	0.263	12.0	0.263
2-Hexanone	U	0.286	U	0.286	U	0.286	U	0.286	U	0.286
Dibromochloromethane	U	0.594	U	0.594	U	0.594	U	0.594	U	0.594
1,2-Dibromoethane	U	0.536	U	0.536	U	0.536	U	0.536	U	0.536
Tetrachloroethene	U	0.473	U	0.473	0.604	0.473	0.749	0.473	0.637	0.473
Chlorobenzene	U	0.321	U	0.321	U	0.321	U	0.321	U	0.321
Ethylbenzene	U	0.303	U	0.303	1.32	0.303	1.28	0.303	1.23	0.303
m&p-Xylene	U	0.303	U	0.303	4.30	0.303	4.08	0.303	4.00	0.303
Bromoform	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721
Styrene	U	0.297	U	0.297	0.447	0.297	0.441	0.297	0.424	0.297
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479	U	0.479	U	0.479	U	0.479
o-Xylene	U	0.303	U	0.303	1.78	0.303	1.68	0.303	1.65	0.303
p-Ethyltoluene	U	0.343	U	0.343	1.46	0.343	1.44	0.343	1.38	0.343
1,3,5-Trimethylbenzene	U	0.343	U	0.343	1.23	0.343	1.17	0.343	1.18	0.343
1,2,4-Trimethylbenzene	U	0.343	U	0.343	3.45	0.343	3.18	0.343	3.19	0.343
1,3-Dichlorobenzene	U	0.419	U	0.419	U	0.419	U	0.419	U	0.419
1,4-Dichlorobenzene	U	0.419	U	0.419	0.465	0.419	0.421	0.419	0.455	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419	U	0.419	U	0.419	U	0.419

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-19		R203001-20		R203001-21		R203001-22		R203001-23	
Sample Number	0-130-1017		0-130-1023		0-130-1024		0-130-1025		0-130-1026	
Sample Location	EQP-IA2		EQP-IA5		EQP-IA4		EQP-AMB1		EQP-AMB2	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Propylene	U	0.120								
Dichlorodifluoromethane	1.57	0.345	1.57	0.345	1.74	0.345	1.72	0.345	1.82	0.345
Chloromethane	1.37	0.144	1.44	0.144	1.52	0.144	1.46	0.144	1.64	0.144
Dichlorotetrafluoroethane	U	0.488								
Vinyl Chloride	U	0.178								
1,3-Butadiene	U	0.154								
Bromomethane	U	0.271								
Chloroethane	U	0.184								
Acetone	107	0.552	63.5	0.552	115	0.552	12.5	0.552	14.9	0.552
Trichlorofluoromethane	1.13	0.392	1.24	0.392	1.16	0.392	1.10	0.392	1.19	0.392
Isopropyl Alcohol	U	2.85	U	2.85	U	2.85	U	2.85	8.42	J 2.85
1,1-Dichloroethene	U	0.277								
Methylene Chloride	0.776	0.242	0.342	0.242	0.431	0.242	0.343	0.242	0.279	0.242
Trichlorotrifluoroethane	U	0.535	0.614	0.535	0.637	0.535	U	0.535	0.648	0.535
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
MTBE	U	0.252								
Vinyl Acetate	U	J 0.246								
2-Butanone	1.92	0.206	1.85	0.206	2.12	0.206	2.02	0.206	2.72	0.206
cis-1,2-Dichloroethene	U	0.277								
Ethyl Acetate	3.93	0.251	1.00	0.251	1.63	0.251	2.15	0.251	2.57	0.251
Hexane	2.38	0.246	1.31	0.246	1.75	0.246	1.75	0.246	1.55	0.246
Chloroform	5.80	0.341	7.40	0.341	15.9	0.341	U	0.341	0.602	0.341
Tetrahydrofuran	0.890	0.206	0.957	0.206	0.347	0.206	1.38	0.206	1.14	0.206
1,2-Dichloroethane	U	0.282								
1,1,1-Trichloroethane	U	0.381								
Benzene	0.913	0.223	0.738	0.223	0.918	0.223	0.846	0.223	0.788	0.223
Carbon Tetrachloride	0.471	0.439	0.504	0.439	0.519	0.439	U	0.439	U	0.439
Cyclohexane	U	0.240								
1,2-Dichloropropane	U	0.322								
1,4-Dioxane	U	0.251								
Trichloroethene	U	0.375								
Heptane	0.722	0.286	0.434	0.286	U	0.286	0.530	0.286	0.530	0.286
cis-1,3-Dichloropropene	U	0.317								
Methyl Isobutyl Ketone	0.937	0.286	1.43	0.286	1.26	0.286	U	0.286	U	0.286
trans-1,3-Dichloropropene	U	0.317								
1,1,2-Trichloroethane	U	0.381								
Toluene	12.3	0.263	10.3	0.263	7.27	0.263	6.35	0.263	5.97	0.263
2-Hexanone	U	0.286								
Dibromochloromethane	U	0.594								
1,2-Dibromoethane	U	0.536								
Tetrachloroethene	0.590	0.473	U	0.473	U	0.473	U	0.473	U	0.473
Chlorobenzene	U	0.321								
Ethylbenzene	1.31	0.303	0.809	0.303	1.03	0.303	0.708	0.303	0.845	0.303
m&p-Xylene	4.23	0.303	2.87	0.303	3.37	0.303	2.40	0.303	2.52	0.303
Bromoform	U	0.721								
Styrene	0.402	0.297	0.307	0.297	0.540	0.297	U	0.297	U	0.297
1,1,2,2-Tetrachloroethane	U	0.479								
o-Xylene	1.72	0.303	1.14	0.303	1.38	0.303	0.881	0.303	1.02	0.303
p-Ethyltoluene	1.37	0.343	0.561	0.343	1.14	0.343	U	0.343	U	0.343
1,3,5-Trimethylbenzene	1.14	0.343	0.516	0.343	0.915	0.343	U	0.343	U	0.343
1,2,4-Trimethylbenzene	3.23	0.343	1.48	0.343	2.47	0.343	0.961	0.343	0.888	0.343
1,3-Dichlorobenzene	U	0.419								
1,4-Dichlorobenzene	0.464	0.419	U	0.419	0.762	0.419	U	0.419	U	0.419
1,2-Dichlorobenzene	U	0.419								

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

SERAS Sample No.	R203001-09		R203001-10		R203001-08		R203001-11		R203001-12	
Sample Number	0-130-1028		0-130-1029		0-130-1027		0-130-1034		0-130-1035	
Sample Location	EQP-AMB4		EQP-AMB5		EQP-AMB3		EQP-IA6		EQP-IA7	
Analyte	Results	RL								
	$\mu\text{g}/\text{m}^3$									
Propylene	U	0.120								
Dichlorodifluoromethane	2.07	0.345	1.52	0.345	1.82	0.345	1.98	0.345	1.76	0.345
Chloromethane	1.86	0.144	1.75	0.144	1.65	0.144	1.78	0.144	1.53	0.144
Dichlorotetrafluoroethane	U	0.488								
Vinyl Chloride	U	0.178								
1,3-Butadiene	U	0.154								
Bromomethane	U	0.271								
Chloroethane	U	0.184								
Acetone	391	11.9	19.0	0.552	1060	11.9	1850	11.9	23300	95.0
Trichlorofluoromethane	1.30	0.392	1.19	0.392	1.15	0.392	1.25	0.392	1.46	0.392
Isopropyl Alcohol	3.99	J 2.85	6.30	J 2.85	U	2.85	U	2.85	6.03	J 2.85
1,1-Dichloroethene	U	0.277								
Methylene Chloride	0.814	0.242	0.444	0.242	2.48	0.242	4.38	0.242	115	0.242
Trichlorotrifluoroethane	0.578	0.535	0.578	0.535	0.562	0.535	0.658	0.535	0.644	0.535
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
MTBE	U	0.252								
Vinyl Acetate	U	J 0.246								
2-Butanone	3.37	0.206	4.63	0.206	3.73	0.206	2.18	0.206	5.28	0.206
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	0.600	0.277	U	0.277
Ethyl Acetate	3.16	0.251	3.62	0.251	4.62	0.251	4.33	0.251	U	0.251
Hexane	3.06	0.246	1.82	0.246	6.49	0.246	11.4	0.246	34.8	0.246
Chloroform	2.40	0.341	U	0.341	1.69	0.341	1.88	0.341	1.75	0.341
Tetrahydrofuran	0.803	0.206	0.837	0.206	0.736	0.206	0.856	0.206	6.00	0.206
1,2-Dichloroethane	U	0.282								
1,1,1-Trichloroethane	U	0.381								
Benzene	0.796	0.223	1.08	0.223	1.10	0.223	1.23	0.223	1.67	0.223
Carbon Tetrachloride	0.459	0.439	U	0.439	U	0.439	0.449	0.439	U	0.439
Cyclohexane	U	0.240	U	0.240	0.309	0.240	U	0.240	1.96	0.240
1,2-Dichloropropane	U	0.322								
1,4-Dioxane	U	0.251								
Trichloroethene	U	0.375								
Heptane	0.598	0.286	0.587	0.286	0.872	0.286	1.13	0.286	1.36	0.286
cis-1,3-Dichloropropene	U	0.317								
Methyl Isobutyl Ketone	1.61	0.286	U	0.286	1.64	0.286	0.603	0.286	9.31	0.286
trans-1,3-Dichloropropene	U	0.317								
1,1,2-Trichloroethane	U	0.381								
Toluene	7.50	0.263	13.6	0.263	16.8	0.263	17.6	0.263	154	0.263
2-Hexanone	U	0.286	U	0.286	0.541	0.286	U	0.286	U	0.286
Dibromochloromethane	U	0.594								
1,2-Dibromoethane	U	0.536								
Tetrachloroethene	U	0.473	U	0.473	0.695	0.473	1.60	0.473	12.3	0.473
Chlorobenzene	U	0.321								
Ethylbenzene	0.797	0.303	0.885	0.303	1.46	0.303	1.96	0.303	3.10	0.303
m&p-Xylene	3.01	0.303	3.02	0.303	6.30	0.303	8.61	0.303	14.0	0.303
Bromoform	U	0.721								
Styrene	U	0.297	0.306	0.297	0.317	0.297	0.374	0.297	0.422	0.297
1,1,2,2-Tetrachloroethane	U	0.479								
o-Xylene	1.37	0.303	1.10	0.303	3.35	0.303	5.36	0.303	17.3	0.303
p-Ethyltoluene	3.15	0.343	0.362	0.343	10.5	0.343	23.2	0.343	191	0.343
1,3,5-Trimethylbenzene	2.42	0.343	0.382	0.343	8.77	0.343	17.9	0.343	152	0.343
1,2,4-Trimethylbenzene	6.25	0.343	1.25	0.343	22.4	0.343	45.0	0.343	450	7.37
1,3-Dichlorobenzene	U	0.419								
1,4-Dichlorobenzene	U	0.419								
1,2-Dichlorobenzene	U	0.419								

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 1.1b Results of the Analysis for VOC ($\mu\text{g}/\text{m}^3$) in Air
 WA# SERAS-130 Cabo Rojo Site

Method SERAS SOP#1814

Analyte	R203001-13		R203001-14		R203001-15	
	Results	RL	Results	RL	Results	RL
	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
Propylene	U	0.120	U	0.120	U	0.120
Dichlorodifluoromethane	1.15	0.345	1.77	0.345	1.78	0.345
Chloromethane	1.05	0.144	1.64	0.144	1.50	0.144
Dichlorotetrafluoroethane	U	0.488	U	0.488	U	0.488
Vinyl Chloride	U	0.178	U	0.178	U	0.178
1,3-Butadiene	U	0.154	U	0.154	U	0.154
Bromomethane	U	0.271	U	0.271	U	0.271
Chloroethane	U	0.184	U	0.184	U	0.184
Acetone	21000	95.0	20300	95.0	913	11.9
Trichlorofluoromethane	1.32	0.392	1.11	0.392	1.19	0.392
Isopropyl Alcohol	U	2.85	3.80	J 2.85	36.5	J 2.85
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277
Methylene Chloride	118	0.242	600	5.21	1.12	0.242
Trichlorotrifluoroethane	0.613	0.535	0.595	0.535	0.627	0.535
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.282
MTBE	U	0.252	U	0.252	U	0.252
Vinyl Acetate	U	J 0.246	U	J 0.246	U	J 0.246
2-Butanone	4.00	0.206	14.5	0.206	24.2	0.206
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277
Ethyl Acetate	0.279	0.251	17.8	0.251	145	0.251
Hexane	35.8	0.246	31.6	0.246	5.11	0.246
Chloroform	1.90	0.341	0.818	0.341	2.27	0.341
Tetrahydrofuran	4.57	0.206	3.08	0.206	U	0.206
1,2-Dichloroethane	U	0.282	U	0.282	1.04	0.282
1,1,1-Trichloroethane	U	0.381	0.431	0.381	U	0.381
Benzene	1.69	0.223	2.93	0.223	2.17	0.223
Carbon Tetrachloride	0.439	0.439	U	0.439	U	0.439
Cyclohexane	2.05	0.240	4.68	0.240	0.793	0.240
1,2-Dichloropropane	U	0.322	U	0.322	U	0.322
1,4-Dioxane	U	0.251	U	0.251	U	0.251
Trichloroethene	U	0.375	U	0.375	U	0.375
Heptane	1.46	0.286	1.98	0.286	5.24	0.286
cis-1,3-Dichloropropene	U	0.317	U	0.317	U	0.317
Methyl Isobutyl Ketone	7.42	0.286	7.32	0.286	0.423	0.286
trans-1,3-Dichloropropene	U	0.317	U	0.317	U	0.317
1,1,2-Trichloroethane	U	0.381	U	0.381	U	0.381
Toluene	152	0.263	144	0.263	814	5.65
2-Hexanone	U	0.286	U	0.286	0.345	0.286
Dibromochloromethane	U	0.594	U	0.594	U	0.594
1,2-Dibromoethane	U	0.536	U	0.536	U	0.536
Tetrachloroethene	12.4	0.473	47.5	0.473	U	0.473
Chlorobenzene	U	0.321	U	0.321	U	0.321
Ethylbenzene	3.21	0.303	3.73	0.303	18.3	0.303
m&p-Xylene	14.6	0.303	14.4	0.303	68.7	0.303
Bromoform	U	0.721	U	0.721	U	0.721
Styrene	0.439	0.297	0.737	0.297	1.97	0.297
1,1,2,2-Tetrachloroethane	U	0.479	U	0.479	U	0.479
o-Xylene	17.9	0.303	12.2	0.303	21.6	0.303
p-Ethyltoluene	200	0.343	105	0.343	25.5	0.343
1,3,5-Trimethylbenzene	154	0.343	78.0	0.343	21.5	0.343
1,2,4-Trimethylbenzene	429	7.37	187	0.343	102	0.343
1,3-Dichlorobenzene	U	0.419	U	0.419	U	0.419
1,4-Dichlorobenzene	0.459	0.419	0.628	0.419	1.39	0.419
1,2-Dichlorobenzene	U	0.419	U	0.419	U	0.419

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.1 Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: LCS 03/03/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.995	97	31 - 133
Dichlorodifluoromethane	1.05	0.758	72	58 - 140
Chloromethane	1.03	0.839	82	52 - 134
Dichlorotetrafluoroethane	1.03	0.966	94	54 - 136
Vinyl Chloride	1.03	0.917	89	53 - 130
1,3-Butadiene	1.04	0.790	76	33 - 130
Bromomethane	1.05	1.00	95	41 - 140
Chloroethane	1.05	0.846	81	44 - 139
Acetone	0.997	0.937	94	35 - 151
Trichlorofluoromethane	1.06	1.01	95	50 - 148
Isopropyl Alcohol	1.07	0.567	53	19 - 166
1,1-Dichloroethene	1.05	0.915	87	49 - 128
Methylene Chloride	1.05	0.910	87	35 - 134
Trichlorotrifluoroethane	1.05	1.10	105	40 - 160
trans-1,2-Dichloroethene	1.05	0.897	85	62 - 123
1,1-Dichloroethane	1.05	0.900	86	64 - 133
MTBE	1.05	0.888	85	56 - 130
Vinyl Acetate	1.06	0.854	81	65 - 117
2-Butanone	1.03	0.932	91	38 - 157
cis-1,2-Dichloroethene	1.05	0.906	86	61 - 129
Ethyl Acetate	1.02	0.923	91	54 - 158
Hexane	1.04	0.918	88	67 - 121
Chloroform	1.02	0.974	96	62 - 141
Tetrahydrofuran	1.06	0.914	86	46 - 119
1,2-Dichloroethane	1.05	0.962	92	59 - 139
1,1,1-Trichloroethane	1.05	0.794	76	53 - 160
Benzene	1.05	0.744	71	62 - 123
Carbon Tetrachloride	1.04	0.877	84	56 - 159
Cyclohexane	1.05	0.800	76	59 - 133
1,2-Dichloropropane	1.05	0.766	73	51 - 149
1,4-Dioxane	1.04	0.939	90	10 - 170
Trichloroethene	1.04	0.903	87	72 - 133
Heptane	1.03	0.792	77	35 - 172
cis-1,3-Dichloropropene	1.08	0.785	73	66 - 156
Methyl Isobutyl Ketone	1.02	0.839	82	10 - 200
trans-1,3-Dichloropropene	1.06	0.785	74	52 - 158
1,1,2-Trichloroethane	1.03	0.875	85	62 - 143
Toluene	1.05	0.855	81	64 - 133
2-Hexanone	1.07	0.895	84	10 - 200
Dibromochloromethane	1.06	0.915	86	64 - 151
1,2-Dibromoethane	1.04	0.901	87	65 - 143
Tetrachloroethene	1.04	0.942	91	66 - 138
Chlorobenzene	1.06	0.903	85	62 - 134
Ethylbenzene	1.06	0.889	84	61 - 139
m&p-Xylene	2.07	0.884	43	14 - 175
Bromoform	1.03	0.985	96	68 - 142
Styrene	1.05	0.908	87	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.895	89	43 - 156
o-Xylene	1.06	0.905	85	53 - 150
p-Ethyltoluene	1.06	1.01	95	59 - 129
1,3,5-Trimethylbenzene	1.06	0.960	91	39 - 125
1,2,4-Trimethylbenzene	1.04	0.971	93	24 - 131
1,3-Dichlorobenzene	1.03	1.08	105	57 - 124
1,4-Dichlorobenzene	1.03	1.08	105	56 - 128
1,2-Dichlorobenzene	1.05	1.11	106	46 - 117

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: LCS 03/04/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	1.09	106	31 - 133
Dichlorodifluoromethane	1.05	0.842	80	58 - 140
Chloromethane	1.03	0.921	89	52 - 134
Dichlorotetrafluoroethane	1.03	0.971	94	54 - 136
Vinyl Chloride	1.03	0.913	89	53 - 130
1,3-Butadiene	1.04	0.776	75	33 - 130
Bromomethane	1.05	0.993	95	41 - 140
Chloroethane	1.05	0.892	85	44 - 139
Acetone	0.997	0.930	93	35 - 151
Trichlorofluoromethane	1.06	0.978	92	50 - 148
Isopropyl Alcohol	1.07	0.663	62	19 - 166
1,1-Dichloroethene	1.05	0.930	89	49 - 128
Methylene Chloride	1.05	0.906	86	35 - 134
Trichlorotrifluoroethane	1.05	1.19	113	40 - 160
trans-1,2-Dichloroethene	1.05	0.929	89	62 - 123
1,1-Dichloroethane	1.05	0.974	93	64 - 133
MTBE	1.05	1.01	96	56 - 130
Vinyl Acetate	1.06	0.714	67	65 - 117
2-Butanone	1.03	1.02	99	38 - 157
cis-1,2-Dichloroethene	1.05	0.968	92	61 - 129
Ethyl Acetate	1.02	0.934	92	54 - 158
Hexane	1.04	0.958	92	67 - 121
Chloroform	1.02	1.03	101	62 - 141
Tetrahydrofuran	1.06	0.885	84	46 - 119
1,2-Dichloroethane	1.05	0.973	93	59 - 139
1,1,1-Trichloroethane	1.05	0.842	80	53 - 160
Benzene	1.05	0.781	74	62 - 123
Carbon Tetrachloride	1.04	0.866	83	56 - 159
Cyclohexane	1.05	0.873	83	59 - 133
1,2-Dichloropropane	1.05	0.825	79	51 - 149
1,4-Dioxane	1.04	0.869	84	10 - 170
Trichloroethene	1.04	1.01	97	72 - 133
Heptane	1.03	0.810	79	35 - 172
cis-1,3-Dichloropropene	1.08	0.896	83	66 - 156
Methyl Isobutyl Ketone	1.02	0.825	81	10 - 200
trans-1,3-Dichloropropene	1.06	0.803	76	52 - 158
1,1,2-Trichloroethane	1.03	0.894	87	62 - 143
Toluene	1.05	0.890	85	64 - 133
2-Hexanone	1.07	0.799	75	10 - 200
Dibromochloromethane	1.06	0.940	89	64 - 151
1,2-Dibromoethane	1.04	0.907	87	65 - 143
Tetrachloroethene	1.04	0.966	93	66 - 138
Chlorobenzene	1.06	0.922	87	62 - 134
Ethylbenzene	1.06	0.933	88	61 - 139
m&p-Xylene	2.07	1.75	85	14 - 175
Bromoform	1.03	0.956	93	68 - 142
Styrene	1.05	0.925	88	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.769	76	43 - 156
o-Xylene	1.06	0.933	88	53 - 150
p-Ethyltoluene	1.06	0.995	94	59 - 129
1,3,5-Trimethylbenzene	1.06	0.952	90	39 - 125
1,2,4-Trimethylbenzene	1.04	0.993	96	24 - 131
1,3-Dichlorobenzene	1.03	1.04	101	57 - 124
1,4-Dichlorobenzene	1.03	1.04	101	56 - 128
1,2-Dichlorobenzene	1.05	1.05	100	46 - 117

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: LCS 03/04/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	1.11	108	31 - 133
Dichlorodifluoromethane	1.05	0.839	80	58 - 140
Chloromethane	1.03	0.918	89	52 - 134
Dichlorotetrafluoroethane	1.03	0.973	95	54 - 136
Vinyl Chloride	1.03	0.939	91	53 - 130
1,3-Butadiene	1.04	0.784	75	33 - 130
Bromomethane	1.05	0.998	95	41 - 140
Chloroethane	1.05	0.866	83	44 - 139
Acetone	0.997	0.855	86	35 - 151
Trichlorofluoromethane	1.06	0.982	93	50 - 148
Isopropyl Alcohol	1.07	0.634	59	19 - 166
1,1-Dichloroethene	1.05	0.938	89	49 - 128
Methylene Chloride	1.05	0.893	85	35 - 134
Trichlorotrifluoroethane	1.05	1.19	113	40 - 160
trans-1,2-Dichloroethene	1.05	0.924	88	62 - 123
1,1-Dichloroethane	1.05	0.960	91	64 - 133
MTBE	1.05	0.977	93	56 - 130
Vinyl Acetate	1.06	0.669	63	* 65 - 117
2-Butanone	1.03	0.969	94	38 - 157
cis-1,2-Dichloroethene	1.05	0.962	92	61 - 129
Ethyl Acetate	1.02	0.916	90	54 - 158
Hexane	1.04	0.950	91	67 - 121
Chloroform	1.02	1.02	100	62 - 141
Tetrahydrofuran	1.06	0.841	79	46 - 119
1,2-Dichloroethane	1.05	0.973	93	59 - 139
1,1,1-Trichloroethane	1.05	0.845	81	53 - 160
Benzene	1.05	0.782	75	62 - 123
Carbon Tetrachloride	1.04	0.863	83	56 - 159
Cyclohexane	1.05	0.876	83	59 - 133
1,2-Dichloropropane	1.05	0.819	78	51 - 149
1,4-Dioxane	1.04	0.819	79	10 - 170
Trichloroethene	1.04	1.02	98	72 - 133
Heptane	1.03	0.821	80	35 - 172
cis-1,3-Dichloropropene	1.08	0.875	81	66 - 156
Methyl Isobutyl Ketone	1.02	0.780	77	10 - 200
trans-1,3-Dichloropropene	1.06	0.787	74	52 - 158
1,1,2-Trichloroethane	1.03	0.873	85	62 - 143
Toluene	1.05	0.875	83	64 - 133
2-Hexanone	1.07	0.759	71	10 - 200
Dibromochloromethane	1.06	0.917	87	64 - 151
1,2-Dibromoethane	1.04	0.892	86	65 - 143
Tetrachloroethene	1.04	0.953	92	66 - 138
Chlorobenzene	1.06	0.899	85	62 - 134
Ethylbenzene	1.06	0.910	86	61 - 139
m&p-Xylene	2.07	1.71	83	14 - 175
Bromoform	1.03	0.932	91	68 - 142
Styrene	1.05	0.899	86	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.761	75	43 - 156
o-Xylene	1.06	0.917	87	53 - 150
p-Ethyltoluene	1.06	0.961	91	59 - 129
1,3,5-Trimethylbenzene	1.06	0.913	86	39 - 125
1,2,4-Trimethylbenzene	1.04	0.931	90	24 - 131
1,3-Dichlorobenzene	1.03	1.01	98	57 - 124
1,4-Dichlorobenzene	1.03	1.02	99	56 - 128
1,2-Dichlorobenzene	1.05	1.01	96	46 - 117

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: LCS 03/04/2012

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.939	91	31 - 133
Dichlorodifluoromethane	1.05	1.05	100	58 - 140
Chloromethane	1.03	0.872	85	52 - 134
Dichlorotetrafluoroethane	1.03	0.936	91	54 - 136
Vinyl Chloride	1.03	0.877	85	53 - 130
1,3-Butadiene	1.04	0.750	72	33 - 130
Bromomethane	1.05	0.944	90	41 - 140
Chloroethane	1.05	0.842	80	44 - 139
Acetone	0.997	0.773	78	35 - 151
Trichlorofluoromethane	1.06	0.935	88	50 - 148
Isopropyl Alcohol	1.07	0.562	53	19 - 166
1,1-Dichloroethene	1.05	0.885	84	49 - 128
Methylene Chloride	1.05	0.844	80	35 - 134
Trichlorotrifluoroethane	1.05	1.13	108	40 - 160
trans-1,2-Dichloroethene	1.05	0.884	84	62 - 123
1,1-Dichloroethane	1.05	0.931	89	64 - 133
MTBE	1.05	0.894	85	56 - 130
Vinyl Acetate	1.06	0.793	75	65 - 117
2-Butanone	1.03	0.891	87	38 - 157
cis-1,2-Dichloroethene	1.05	0.914	87	61 - 129
Ethyl Acetate	1.02	0.912	89	54 - 158
Hexane	1.04	0.908	87	67 - 121
Chloroform	1.02	0.975	96	62 - 141
Tetrahydrofuran	1.06	0.784	74	46 - 119
1,2-Dichloroethane	1.05	0.931	89	59 - 139
1,1,1-Trichloroethane	1.05	0.807	77	53 - 160
Benzene	1.05	0.758	72	62 - 123
Carbon Tetrachloride	1.04	0.858	83	56 - 159
Cyclohexane	1.05	0.826	79	59 - 133
1,2-Dichloropropane	1.05	0.807	77	51 - 149
1,4-Dioxane	1.04	0.756	73	10 - 170
Trichloroethene	1.04	0.922	89	72 - 133
Heptane	1.03	0.806	78	35 - 172
cis-1,3-Dichloropropene	1.08	0.867	80	66 - 156
Methyl Isobutyl Ketone	1.02	0.722	71	10 - 200
trans-1,3-Dichloropropene	1.06	0.809	76	52 - 158
1,1,2-Trichloroethane	1.03	0.870	85	62 - 143
Toluene	1.05	0.847	81	64 - 133
2-Hexanone	1.07	0.692	65	10 - 200
Dibromochloromethane	1.06	0.902	85	64 - 151
1,2-Dibromoethane	1.04	0.876	84	65 - 143
Tetrachloroethene	1.04	0.918	88	66 - 138
Chlorobenzene	1.06	0.861	81	62 - 134
Ethylbenzene	1.06	0.869	82	61 - 139
m&p-Xylene	2.07	1.64	79	14 - 175
Bromoform	1.03	0.906	88	68 - 142
Styrene	1.05	0.869	83	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.776	77	43 - 156
o-Xylene	1.06	0.857	81	53 - 150
p-Ethyltoluene	1.06	0.888	84	59 - 129
1,3,5-Trimethylbenzene	1.06	0.859	81	39 - 125
1,2,4-Trimethylbenzene	1.04	0.883	85	24 - 131
1,3-Dichlorobenzene	1.03	0.944	92	57 - 124
1,4-Dichlorobenzene	1.03	0.955	93	56 - 128
1,2-Dichlorobenzene	1.05	0.944	90	46 - 117

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.1 (cont) Results of the LCS Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: LCS 03/05/12

Analyte	LCS Spike Amount ppbv	LCS Recovered ppbv	% Recovery	QC Limits % Recovery
Propylene	1.03	0.876	85	31 - 133
Dichlorodifluoromethane	1.05	0.962	92	58 - 140
Chloromethane	1.03	0.803	78	52 - 134
Dichlorotetrafluoroethane	1.03	0.886	86	54 - 136
Vinyl Chloride	1.03	0.840	82	53 - 130
1,3-Butadiene	1.04	0.699	67	33 - 130
Bromomethane	1.05	0.890	85	41 - 140
Chloroethane	1.05	0.794	76	44 - 139
Acetone	0.997	0.738	74	35 - 151
Trichlorofluoromethane	1.06	0.883	83	50 - 148
Isopropyl Alcohol	1.07	0.534	50	19 - 166
1,1-Dichloroethene	1.05	0.826	79	49 - 128
Methylene Chloride	1.05	0.815	78	35 - 134
Trichlorotrifluoroethane	1.05	1.05	100	40 - 160
trans-1,2-Dichloroethene	1.05	0.828	79	62 - 123
1,1-Dichloroethane	1.05	0.853	81	64 - 133
MTBE	1.05	0.840	80	56 - 130
Vinyl Acetate	1.06	0.737	70	65 - 117
2-Butanone	1.03	0.848	82	38 - 157
cis-1,2-Dichloroethene	1.05	0.856	82	61 - 129
Ethyl Acetate	1.02	0.864	85	54 - 158
Hexane	1.04	0.848	82	67 - 121
Chloroform	1.02	0.920	90	62 - 141
Tetrahydrofuran	1.06	0.741	70	46 - 119
1,2-Dichloroethane	1.05	0.877	84	59 - 139
1,1,1-Trichloroethane	1.05	0.792	75	53 - 160
Benzene	1.05	0.718	68	62 - 123
Carbon Tetrachloride	1.04	0.826	79	56 - 159
Cyclohexane	1.05	0.803	77	59 - 133
1,2-Dichloropropane	1.05	0.749	71	51 - 149
1,4-Dioxane	1.04	0.712	69	10 - 170
Trichloroethene	1.04	0.878	84	72 - 133
Heptane	1.03	0.747	73	35 - 172
cis-1,3-Dichloropropene	1.08	0.818	76	66 - 156
Methyl Isobutyl Ketone	1.02	0.696	68	10 - 200
trans-1,3-Dichloropropene	1.06	0.757	71	52 - 158
1,1,2-Trichloroethane	1.03	0.806	78	62 - 143
Toluene	1.05	0.795	76	64 - 133
2-Hexanone	1.07	0.665	62	10 - 200
Dibromochloromethane	1.06	0.857	81	64 - 151
1,2-Dibromoethane	1.04	0.830	80	65 - 143
Tetrachloroethene	1.04	0.870	84	66 - 138
Chlorobenzene	1.06	0.813	77	62 - 134
Ethylbenzene	1.06	0.812	77	61 - 139
m&p-Xylene	2.07	1.56	75	14 - 175
Bromoform	1.03	0.875	85	68 - 142
Styrene	1.05	0.826	79	66 - 132
1,1,2,2-Tetrachloroethane	1.01	0.742	74	43 - 156
o-Xylene	1.06	0.825	78	53 - 150
p-Ethyltoluene	1.06	0.850	80	59 - 129
1,3,5-Trimethylbenzene	1.06	0.821	78	39 - 125
1,2,4-Trimethylbenzene	1.04	0.839	81	24 - 131
1,3-Dichlorobenzene	1.03	0.899	87	57 - 124
1,4-Dichlorobenzene	1.03	0.902	88	56 - 128
1,2-Dichlorobenzene	1.05	0.915	87	46 - 117

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.2 Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: 0-130-1009

Analyte	Initial Analysis ppbv	Duplicate Analysis ppbv	RPD	QC Limit RPD
Vinyl Chloride	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Tetrachloroethene	U	U	NC	≤25

REPORT OF LABORATORY ANALYSIS
 This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: 0-130-1014

Analyte	Initial Analysis	Duplicate Analysis	RPD	QC Limit
	ppbv	ppbv		RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.365	0.330	10	≤25
Chloromethane	0.736	0.683	7	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	48.5	46.5	4	≤25
Trichlorofluoromethane	0.221	0.207	7	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.239	0.231	3	≤25
Trichlorotrifluoroethane	0.0790	0.0762	4	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	1.15	1.09	5	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	1.30	1.27	2	≤25
Hexane	0.654	0.610	7	≤25
Chloroform	1.24	1.20	3	≤25
Tetrahydrofuran	U	0.0904	NC	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	0.307	0.290	6	≤25
Carbon Tetrachloride	0.0765	0.0728	5	≤25
Cyclohexane	U	U	NC	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	0.219	0.267	20	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	0.264	0.245	7	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	3.36	3.17	6	≤25
2-Hexanone	U	U	NC	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	0.0891	0.0853	4	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	0.305	0.291	5	≤25
m&p-Xylene	0.991	0.932	6	≤25
Bromoform	U	U	NC	≤25
Styrene	0.105	0.100	5	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	0.410	0.383	7	≤25
p-Ethyltoluene	0.297	0.276	7	≤25
1,3,5-Trimethylbenzene	0.251	0.231	8	≤25
1,2,4-Trimethylbenzene	0.702	0.666	5	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	0.0773	0.0738	5	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory





Table 2.2 (cont) Results of the Duplicate Analysis for VOC in Air
 WA# SERAS-130 Cabo Rojo Site

Sample ID: 0-130-1027

Analyte	Initial Analysis	Duplicate Analysis	RPD	QC Limit
	ppbv	ppbv		RPD
Propylene	U	U	NC	≤25
Dichlorodifluoromethane	0.368	0.332	10	≤25
Chloromethane	0.798	0.791	0.9	≤25
Dichlorotetrafluoroethane	U	U	NC	≤25
Vinyl Chloride	U	U	NC	≤25
1,3-Butadiene	U	U	NC	≤25
Bromomethane	U	U	NC	≤25
Chloroethane	U	U	NC	≤25
Acetone	446	468	5	≤25
Trichlorofluoromethane	0.205	0.201	2	≤25
Isopropyl Alcohol	U	U	NC	≤25
1,1-Dichloroethene	U	U	NC	≤25
Methylene Chloride	0.714	0.701	2	≤25
Trichlorotrifluoroethane	0.0733	0.0740	1	≤25
trans-1,2-Dichloroethene	U	U	NC	≤25
1,1-Dichloroethane	U	U	NC	≤25
MTBE	U	U	NC	≤25
Vinyl Acetate	U	U	NC	≤25
2-Butanone	1.26	1.22	3	≤25
cis-1,2-Dichloroethene	U	U	NC	≤25
Ethyl Acetate	1.28	1.26	2	≤25
Hexane	1.84	1.84	0	≤25
Chloroform	0.346	0.347	0.3	≤25
Tetrahydrofuran	0.250	0.253	1	≤25
1,2-Dichloroethane	U	U	NC	≤25
1,1,1-Trichloroethane	U	U	NC	≤25
Benzene	0.345	0.312	10	≤25
Carbon Tetrachloride	U	U	NC	≤25
Cyclohexane	0.0899	0.0920	2	≤25
1,2-Dichloropropane	U	U	NC	≤25
1,4-Dioxane	U	U	NC	≤25
Trichloroethene	U	U	NC	≤25
Heptane	0.213	0.217	2	≤25
cis-1,3-Dichloropropene	U	U	NC	≤25
Methyl Isobutyl Ketone	0.401	0.359	10	≤25
trans-1,3-Dichloropropene	U	U	NC	≤25
1,1,2-Trichloroethane	U	U	NC	≤25
Toluene	4.46	4.24	5	≤25
2-Hexanone	0.132	0.130	2	≤25
Dibromochloromethane	U	U	NC	≤25
1,2-Dibromoethane	U	U	NC	≤25
Tetrachloroethene	0.103	0.0996	3	≤25
Chlorobenzene	U	U	NC	≤25
Ethylbenzene	0.337	0.321	5	≤25
m&p-Xylene	1.45	1.37	6	≤25
Bromoform	U	U	NC	≤25
Styrene	0.0745	0.0732	2	≤25
1,1,2,2-Tetrachloroethane	U	U	NC	≤25
o-Xylene	0.771	0.735	5	≤25
p-Ethyltoluene	2.14	2.01	6	≤25
1,3,5-Trimethylbenzene	1.78	1.66	7	≤25
1,2,4-Trimethylbenzene	4.56	4.25	7	≤25
1,3-Dichlorobenzene	U	U	NC	≤25
1,4-Dichlorobenzene	U	U	NC	≤25
1,2-Dichlorobenzene	U	U	NC	≤25

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of the ERT/SERAS Laboratory



USEPA

DateShipped: 3/1/2012
 CarrierName: FedEx
 AirbillNo:

R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo
 Contact Name: Michael Cartwright
 Contact Phone: 732-321-4284

No: 0-130-3/1/12-0008

Cooler #: 31
 Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
-01	0-130-1009	S2B-IA2	TO-15 (Chlorinated)	Air	1	SUMMA	14072	13948	-30	3/1/2012	6:43:00 AM
-02	0-130-1010	S2B-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	14070	14045	-30	3/1/2012	6:42:00 AM
-03	0-130-1011	S2B-IA1	TO-15 (Chlorinated)	Air	1	SUMMA	206	13925	-30	3/1/2012	6:42:00 AM
-04	0-130-1030	S2B-AMB1	TO-15 (Chlorinated)	Air	1	SUMMA	238	13995	-30	3/1/2012	8:48:00 AM
-05	0-130-1031	S2B-AMB2	TO-15 (Chlorinated)	Air	1	SUMMA	14068	14027	-30	3/1/2012	8:50:00 AM
-06	0-130-1032	S2B-AMB3	TO-15 (Chlorinated)	Air	1	SUMMA	27	13792	-30	3/1/2012	8:45:00 AM
-07	0-130-1056	Trip Blank	TO-15 (Full List)	Air	1	SUMMA	54	—	-30	3/1/12	1:00:00 PM
<i>Muc</i>											

Special Instructions: Analyze per PWA. Samples 0-130-1009 through 1032 analyzed for chlorinated VOC list only. Trip blank gets full TO-15 analysis.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	<i>[Signature]</i>	3/1/12	<i>[Signature]</i>	3/2/12	1100						

SERAS-130-DAR-031212

USEPA

Date Shipped: 3/1/2012
 Carrier Name: FedEx
 Airbill No: 899458692181

CHAIN OF CUSTODY RECORD

Cabo Rojo
 Contact Name: Michael Cartwright
 Contact Phone: 732-321-4284

No: 0-130-3/1/12-0007

Cooler #: 22
 Lab: SERAS

R2030017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
-08	0-130-1027	EQP-AMB3	TO-15 (Full List)	Air	1	SUMMA	75	14049	-30	3/1/2012	8:24:00 AM
-09	0-130-1028	EQP-AMB4	TO-15 (Full List)	Air	1	SUMMA	59	13987	-30	3/1/2012	8:24:00 AM
-10	0-130-1029	EQP-AMB5	TO-15 (Full List)	Air	1	SUMMA	180	13802	-30	3/1/2012	8:32:00 AM
-11	0-130-1034	EQP-IA6	TO-15 (Full List)	Air	1	SUMMA	213	13786	-30	3/1/2012	9:30:00 AM
-12	0-130-1035	EQP-IA7	TO-15 (Full List)	Air	1	SUMMA	8	13993	-30	3/1/2012	9:32:00 AM
-13	0-130-1036	EQP-IA7	TO-15 (Full List)	Air	1	SUMMA	186	13952	-30	3/1/2012	9:32:00 AM
-14	0-130-1038	EQP-IA8	TO-15 (Full List)	Air	1	SUMMA	138	14048	-30	3/1/2012	9:34:00 AM
-15	0-130-1040	EQP-IA9	TO-15 (Full List)	Air	1	SUMMA	200	13782	-30	3/1/2012	10:18:00 AM

Special Instructions: Analyze per PWA. Full TO-15 list.

SAMPLES TRANSFERRED FROM

NOTE - Samples 0-130-1027, 1034, 1035, 1036, 1038 and 1040 are indoor air/ambient samples collected in/near a print shop and a freshly painted building and should be analyzed last.

CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
All/Analysis	Michael	3/1/12	[Signature]	3/2/12	1100						

SERAS-130-DAR-031212

USEPA

Date Shipped: 3/1/2012
 Carrier Name: FedEx
 Airbill No: 899458692181

R203001

CHAIN OF CUSTODY RECORD

Cabo Rojo
 Contact Name: Michael Cartwright
 Contact Phone: 732-321-4284

No: 0-130-3/1/12-0006

Cooler #: 1
 Lab: SERAS 23

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Date	Stop Time
-16	0-130-1014	EQP-IA1	TO-15 (Full List)	Air	1	SUMMA	245	13926	-30	3/1/2012	7:48:00 AM
-17	0-130-1015	EQP-IA1	TO-15 (Full List)	Air	1	SUMMA	118	14006	-30	3/1/2012	7:48:00 AM
-18	0-130-1016	EQP-IA3	TO-15 (Full List)	Air	1	SUMMA	258	13908	-30	3/1/2012	7:44:00 AM
-19	0-130-1017	EQP-IA2	TO-15 (Full List)	Air	1	SUMMA	201	13947	-30	3/1/2012	7:46:00 AM
-20	0-130-1023	EQP-IA5	TO-15 (Full List)	Air	1	SUMMA	260	14004	-30	3/1/2012	7:52:00 AM
-21	0-130-1024	EQP-IA4	TO-15 (Full List)	Air	1	SUMMA	14069	13793	-30	3/1/2012	7:50:00 AM
-22	0-130-1025	EQP-AMB1	TO-15 (Full List)	Air	1	SUMMA	193	13932	-30	3/1/2012	8:14:00 AM
-23	0-130-1026	EQP-AMB2	TO-15 (Full List)	Air	1	SUMMA	45	13781	-30	3/1/2012	8:18:00 AM

SAMPLES TRANSFERRED FROM
 CHAIN OF CUSTODY #

Special Instructions: Analyze per PWA. Full TO-15 list.

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
AU/Analysis	Michael Cartwright	3/1/12	[Signature]	3/2/12	1000						

SERAS-130-DAR-031212